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## CLAIMS

## What is claimed is:

## 1. A compound of the formula:

in which:

- a) X<sup>1</sup> is represented by cyano, halogen or haloalkyl,
- b) R<sup>1</sup> and R<sup>2</sup> are each independently represented by hydrogen or (C<sub>1</sub>-C<sub>6</sub>) alkyl, optionally substituted,
- c) Alk<sup>1</sup> is represented by a C<sub>1</sub>-C<sub>2</sub> linear alkylene group, in which up to two hydrogen atoms are optionally replaced by a substituent selected from the group consisting of C<sub>1</sub>-C<sub>6</sub> alkyl optionally substituted, halogen, hydroxy, thiol, and cyano,
- d) n is represented by the integer 0 or 1,
- e) Y is represented by NX<sup>2</sup>X<sup>3</sup> or O-X<sup>3</sup>,
- f) X<sup>2</sup> is represented by hydrogen or (C<sub>1</sub>,C<sub>8</sub>) alkyl optionally substituted,
- g) X<sup>3</sup> is represented by
  - i. hydrogen,
  - ii. (C<sub>1-</sub>C<sub>12</sub> )alkyl, optionally substituted,
  - iii. (C2-C12)alkenyl, optionally substituted,
  - iv. (C<sub>2</sub>-C<sub>12</sub>)alkynyl, optionally substituted,
  - v. (C<sub>3-</sub>C<sub>10</sub>)cycloalkyl, optionally substituted,
  - vi.  $(C_8-C_{10})$  cycloalkyl $(C_1-C_6)$ alkyl, in which the alkyl and cycloalkyl moieties may each be optionally substituted,
  - vii. (C<sub>6</sub>-C<sub>10</sub>)aryl, optionally substituted,
  - viii.  $(C_6-C_{10})$ aryl $(C_1-C_6)$ alkyl, in which the alkyl and aryl moieties may each be optionally substituted,

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- ix.  $-(CH_2)-(Alk^2)_q-C(O)R^3$ , in which Alk² is represented by a  $(C_1-C_8)$  linear alkylene group, in which up to eight hydrogen atoms may optionally be replaced by a substituent, selected from the group consisting of  $(C_1-C_6)$  alkyl optionally substituted,  $(C_1-C_6)$  alkoxy, halogen, hydroxy, thiol, cyano, and  $NR^9R^9$  in which  $R^8$  and  $R^9$  are each independently represented by hydrogen or  $(C_1-C_6)$  alkyl,  $(C_1-C_1)$  alkyl,  $(C_2-C_1)$  alkyl, or  $(C_6-C_1)$  aryl, or  $(C_6-C_1)$  alkyl, in which the alkyl and aryl moieties may each be optionally substituted,
- x.  ${}^{\circ}(CH_2)^{-}(Alk^2)_q C(O) O R^4$ , in which  $Alk^2$  and q, are as defined above, and  $R^4$  is represented by hydrogen,  $(C_1 C_2)$  alkyl,  $(C_6 C_{10})$  aryl, or  $(C_6 C_{10})$  aryl $(C_1 C_6)$  alkyl, in which the alkyl and aryl moleties may be optionally substituted,
- xi.  $-(CH_2)-(Alk^2)_q-C(O)-NR^5R^6$  in which  $Alk^2$  and q are as described above, and  $R^5$  and  $R^6$  are each independently represented by hydrogen,  $(C_1-C_{12})$ alkyl,  $(C_6-C_{10})$ aryl, or  $(C_6-C_{10})$ aryl $(C_1-C_6)$ alkyl, in which the alkyl and aryl moieties may be optionally substituted,
- xii.  $-(CH_2)-(Alk^2)_q-Y-R^7$ , in which  $Alk^2$  and q are as defined above, Y is O or S, and  $R^7$  is selected from the group consisting of hydrogen,  $(C_1-C_{12})$ alkyl,  $(C_6-C_{10})$ aryl, or  $(C_6-C_{10})$ aryl $(C_1-C_6)$ alkyl, in which the alkyl and aryl moleties may be optionally substituted,
- xiii. heteroaryl, optionally substituted,
- xiv. heteroaryl(C<sub>1</sub>,C<sub>6</sub>)alkyl, in which the heteroaryl and alkyl moleties may each be optionally substituted,
- xv. heterocyclic, optionally substituted,
- xvi. heterocyclic(C<sub>1</sub>-C<sub>6</sub>)alkyl, in which the alkyl

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and heterocyclic moieties may each be substituted, or,

- h) for those compounds in which Y is N, X<sup>2</sup> and X<sup>3</sup>, along with the adjacent nitrogen atom, may form a heterocyclic ring, which may optionally be substituted, or a salt, solvate, or prodrug thereof.
- A compound according to claim 1 in which one of R<sup>1</sup> or R<sup>2</sup> is hydrogen and the other of R<sup>1</sup> or R<sup>2</sup> is selected from the group consisting of isobutyl, propyl, n-butyl, isopropyl, and ethyl.
- 3. A compound according to claim 1 or 2 in which n is 0.
- A compound according to claim 1, 2, or 3 in which X<sup>1</sup> is trifluoromethyl and is located at the 3-position of the phenyl ring.
- 5. A compound according to claim 1, 2, 3, or 4 in which Y is NX<sup>2</sup>X<sup>3</sup>.
- A compound according to claim 5 in which X<sup>2</sup> is hydrogen.
- 7 A compound according to claim 6 In which X<sup>3</sup> is represented by a substituent selected from the group consisting of (C<sub>1</sub>-C<sub>12</sub>)alkyl, (C<sub>3</sub>-C<sub>10</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>6</sub>-C<sub>10</sub>)aryl(C<sub>1</sub>-C<sub>6</sub>alkyl, heteroaryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, and heterocyclic(C<sub>1</sub>-C<sub>2</sub>)alkyl.
- 25 8. A compound according to claim 1, 2, 3, or 4 in which Y is OX3.
  - A compound according to anyone of claims 1-8 in which X¹ is represented by halogen or haloalkyl.
- 30 10. Use of a compound according to anyone of claims 1-9 as a medicine.
  - Use of a compound according to anyone of claims 1-9 in the manufacture of a medicament for inhibiting activation of the androgen receptor

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- 12. Use of a compound according to anyone of claims 1-9 in the manufacture of a medicament for the alleviating a condition selected from the group consisting of hormone dependent cancers, benign hyperplasia of the prostate, aone, hirsutism, excess sebum, alopecia, premenstrual syndrome, lung cancer, precocious puberty, osteoporosis, hypogonadism, age-related decrease in muscle mass, and anemia.
- A pharmaceutical composition comprising a compound according to anyone of claims 1-9 in admixture with 1, or more, pharmaceutically acceptable excipients.
- 14. A topical pharmaceutical formulation comprising a compound according to anyone of claims 1-9 in admixture with 1, or more, pharmaceutically acceptable excipients suitable for dermal application.
- 15. An article of manufacture comprising a compound according to anyone of claims 1-9 packaged for retail distribution, which advises a consumer how to utilize the compound to alleviate a condition selected from the group consisting of acne, alopecia, and oily skin.